Pekin Lake
Site Specific
Illinois River Ecosystem Restoration

DRAFT
PROJECT MANAGEMENT PLAN
And
QUALITY CONTROL PLAN

Prepared by:
U.S. Army Corps of Engineers
Rock Island District

March 2002

I. Introduction

A. Purpose

This document is the Project Management Plan (PMP) for the Pekin Lake Site-Specific Feasibility Evaluation which is one site-specific component of the Illinois River Ecosystem Restoration Feasibility Study. This PMP has been developed by the Rock Island District of the U.S. Army Corps of Engineers in consultation with the Illinois Department of Natural Resources (non-Federal sponsor), the U.S. Fish and Wildlife Service, the Natural Resources Conservation Service, and Tri-County Regional Planning Commission.

This site-specific evaluation is being conducted as a component of the Illinois River Ecosystem Restoration Study, which is a General Investigation study authorized by Section 216 of the Flood Control Act of 1970 with supplemental authority from Section 519 (Illinois River Basin Restoration) of the Water Resources Development Act of 2000. The study was initiated pursuant to the provision of funds in the Energy and Water Development Appropriations Act, 1998. The Feasibility Study was initiated in October 2000 with completion scheduled for December 2003.

The PMP details the scope, schedule, and budget for feasibility study tasks as well as the division of responsibilities for accomplishment by the Rock Island District, the non-Federal sponsor, and respective consultants and contractors. A detailed work description, cost-summary table, and preliminary schedule outlining the initiation and completion of tasks are included in the PMP.

The PMP was prepared in accordance with U.S. Army Corps of Engineers guidance contained in Engineering Circular (EC) 1105-2-208, EC 1105-2-214, Engineering Regulation (ER) 1105-2-100 and ER 5-1-11. The Quality Control Plan has been integrated into the PMP document.

B. Deliverable Product

The resulting product from this feasibility evaluation will be a Definite Project Report (DPR) with Integrated Environmental Assessment. The goals of this feasibility level evaluation are to:

- Identify environmental baselines, problems, and opportunities;
- Identify project goals and objectives;
- Identify project features consistent with program criteria;
- Identify alternatives consistent with program criteria;
- Evaluate alternatives based on costs and environmental considerations; and
- Identify a selected plan with implementation steps.

Other products include the following: (1) Draft Project Cooperation Agreement (PCA), (2) Draft PMP for Implementation, and (3) Other Supporting Plans. The PCA is a legally binding agreement that sets forth the terms and conditions of the relationship between the Federal Government and the non-Federal sponsor for the construction, operation, and maintenance of the project. The Real Estate Plan identifies all real estate requirements for the implementation, operation and maintenance of the project, and the estimated value thereof. The Draft PMP for implementation addresses the preparation of plans and specifications for the initial construction

contracts and quality assurance documents. It will form the basis for the PMP for project construction.

II. Project Overview for Pekin Lake

A. Study Area Description

Pekin Lake is a backwater lake complex located adjacent to the Illinois River at RM 153-156. The site encompasses approximately 1,200 acres of shallow backwater lakes and bottomland forest. The project area is identified on Figure 1.

B. Problems, Opportunities, and Alternatives to be Considered

The principal problems at Pekin Lake are altered hydrologic regimes and the lack of depth diversity resulting in reduced habitat value and diversity. Backwater lakes and side channels along the Illinois River formerly provided a great variety of high quality habitat types with greater depth diversity. These areas formerly provided large areas of deep and shallow water habitats and numerous sloughs and forested wetland habitats. Pekin Lake, which has a relatively low sedimentation rate compared to many other Illinois backwaters, provides an excellent opportunity for restoration of many of these habitat types.

Potential opportunities are listed below that could be addressed by the Corps of Engineers or in collaboration with the non-Federal sponsors and other Federal and local agencies.

1. Preserve and maintaining the existing natural heritage and wildlife resource integrity of the site with emphasis on waterfowl management, protecting the heron rookery and other sensitive avian species, and maintaining the site's value as a fish nursery to the LaGrange Pool of the Illinois River.

2. Restore habitats and species lost from the site including overwintering habitat for fish, aquatic plants, mast trees, and invertebrates.

3. Maintain and improve the sites connectivity with the river.

4. Provide public recreational activities that are consistent with the major objective and that do not detract from the areas' natural value, including consumptive fish and wildlife programs, picnicking, canoeing, small pleasure boating, hiking, and wildlife observation and to provide for scientific research and educational studies at the site. Federal involvement in recreation features is limited to 10 percent of the overall project costs and the features can not diminish the restoration efforts.

The following goals, objectives, and enhancement features were identified:

Project Goals, Objectives, and Potential Enhancement Features

Goal	Objective	Feature (proposed)
Improve aquatic habitat	Provide overwintering fish habitat	Dredge connection with main channel
		Dredge areas of >8ft depth
	Improve spawning and nursery habitat	Dredge areas of ~4ft depth over firm substrate
		Add structure – rock/woody debris
	Improve water quality – (ammonia and DO)	Maintain flow or some aeration through – siphon, pipeline from Peoria pool, or bubbler.
Enhance wetlands	Improve migratory waterfowl and shorebird habitat	Establish a waterbird management area (improve moist soil plant production)
	Maintain and enhance heron feeding areas	Establish a waterbird management area (depths 2-3 feet and less)
	Increase the diversity and extent of aquatic vegetation	Decrease rapid water level fluctuation (lower and upper management areas)
		Place a closing structure on the lower end of the site.
Improve terrestrial habitat	Protect heron and egret rookery	Manage water levels to avoid impacts to rookery trees
		Develop future rookery sites
	Improve forest diversity and introduce mast trees	Use dredge material to create areas of higher elevation.
		Forest management and tree planting

C. Monitoring Plan

Appendix A contains information on the monitoring components. Table 1 presents overall types, purposes, and responsibilities of monitoring and data collection. Table 2 presents actual monitoring and data parameters grouped by project phase and data collection intervals. Existing pre-project monitoring data has been included. The detailed monitoring plan will be developed for the project and will be included in the Definite Project Report.

III. Work Breakdown Structure (WBS)

The WBS is a product-oriented hierarchy of the scope of work and is broken down into component products and sub-products. The WBS is intended to summarize the entire feasibility work effort and is an outline of the specific tasks that are to be accomplished to produce the feasibility study products.

Work Breakdown Structure	Cost [1]
Start Feasibility	
Existing Project Conditions	
Specify Problem and Opportunities	
Inventory Existing Data	*
Physical Site Conditions, Surveys, and Mapping	*
Hydrology and Hydraulics, Geotechnical, HTRW	*
Biological and Cultural Data	*
Real Estate Data	*
Forecast Future Resource Conditions	*
Project Formulation	*
Formulate Goal and Objectives	*
Formulate Potential Features	*
Formulate Alternatives & Preliminary Designs	*
Evaluation of Alternatives & Preliminary Designs	25
Engineering Design (Civil, Structural, Electrical, Mechanical)	125
Surveys and Mapping	40
Hydrology and Hydraulics	35
Geotechnical	50
HTRW	20
Cost Estimate	20
Tract Ownership Data and Rights of Entry	15
Cultural Survey	25
Habitat Evaluation and Analysis	35
Review of Alternatives	*
Agency Coordination – In-Progress Review	*
Public Open House	15
Alternatives Evaluation Recommending Selected Plan	*
Assessment of Selected Plan	25
Design and Construction Analysis	*
Engineering Design (Civil, Structural, Electrical, Mechanical)	*
Geotechnical	*
Hydrology and Hydraulics (Sediment Rate Analysis)	15
Water Quality	10
HTRW	*
Obtain Permits	*
Feasibility Level Cost Estimate	*
Real Estate Plan with Draft PCA	25
Financial Analysis Report	5
Environmental Analysis	*
Economic and Social	10
Natural Resources	30
Fish and Wildlife Coordination Act	10
Cultural Resources	*
Operations, Maintenance, and Rehabilitation Considerations	*
Post-Construction Project Performance Assessment	*
Draft Report with NEPA	25
Internal Technical Review	20
Value Engineering	15
Agency Review [2] (IL DNR Work in Kind)	30
Public Review	*
Project Approval/Final Report with NEPA	10
Draft PMP for Implementation	20
TOTAL COST	655

Note: 1) Several tasks have preliminary and final evaluations, etc. Costs were only included one time and (*)'s were placed by the related efforts to show that the costs were already included.
2) IDNR WIK of $30k spread among formulation and assessment tasks.

IV. Organizational Breakdown Structure (OBS)

The OBS identifies the organizations that have lead and support responsibilities for completing each feasibility study task. In addition to identifying task responsibilities, the OBS includes mechanisms for assuring proper coordination among the Federal and non-Federal study management team members involved in preparing the feasibility study. Details on the responsibilities of each organization can be found in Appendix B.

A. Product Development Team

The following professionals represent the organizations on the product development team. Changing of members will not change quality aspects of this project.

Name	Organization	Discipline
Corps:		
Brad Thompson/Marshall Plumley	PM-M	Project Manager/Study Manager
Tom Heinold	ED-DN	Project Engineer
Randy Kraciun	PM-A	Project Biologist
Mike Schwar	ED-HH	Hydraulic Engineer
Terri Kirkeeng	ED-C	Cost Engineering
John Behrens & Bryan Pattschull	ED-DG	Electrical and Mechanical Engineer
Bill Riebe	ED-S	Survey
Ron Deiss	PM-A	Cultural Resources
Sharryn Jackson	PM-A	Social-Economic Analysis
Joanne Lieving	RE-A	Real Estate
Mike Brown	ED-HW	Water Quality and Sedimentation
Matt Stewart	ED-G	Geotechnical Engineer
Wen Tsau	ED-DS	Structural Engineer
Victor Gervais	CD	Construction Division
Rod Clausen	CD-E	Construction Division
Sponsor:		
Jim Mick	Illinois DNR	Fisheries
Mike Cochran	Illinois DNR	Fisheries
Joe Ferencak	Illinois DNR	Fisheries
Tom Beissel	Illinois DNR	Wildlife
Wayne Herndon	Illinois DNR	Wildlife
Michelle Simone	Illinois DNR	Heritage
Byron Paulsen	Illinois DNR	Wildlife
Randy Timmons	Illinois DNR	Forestry
Michael Wefer	Illinois DNR	Wildlife
Pat Brown	INHS	Wildlife
Steve Havera	INHS	Wildlife
Mark Pegg	INHS	Fisheries
John Marlin	WMRC	Dredging Technology
Mike Demissie	ISWS	Hydrologist
Other Agencies:		
Sharon Hartzold	NRCS	Planning
Doug Blodget	TNC	The Nature Conservancy - Biologist
Chris Boyd	TCRCP	Planning Tri-County Regional Planning Commission

B. Description of Coordination Mechanisms

The primary internal coordination mechanisms will be the monthly Project Review Board (PRB) meetings, monthly meetings of the study management team, and Alternative Formulation Briefings and Issue Resolution Conferences scheduled as necessary at critical phases of the study. External agency counterparts include: Illinois Department of Natural Resources (local sponsor), U.S. Environmental Protection Agency, State Historic Preservation Officer, Illinois Environmental Protection Agency, Illinois Department of Agriculture, Natural Resources Conservation Service, U.S. Fish and Wildlife Service, State and local legislators, Soil and Water Conservation Districts, county and city officials, and organizations. Coordination will be accomplished by a number of different groups and teams. The Illinois River Working Group meets semi-annually to provide study status and information on interim products to all interested Federal, State, and local agencies as well as non-governmental organizations. The Illinois River Steering Group, which meets quarterly, is the core group responsible for conducting the Illinois River Ecosystem Restoration Feasibility Study and consists of State and Federal agencies. The Middle Illinois-Peoria Regional Team meets monthly on the site-specific projects for this region. The Regional Team is an interagency product development team.

One or two public meetings/workshops will be scheduled during the study period to gather input, report on study progress, or to report study findings. Project briefings will be provided and fact sheets prepared throughout the project period for HQUSACE, CEMVD, congressional representatives, State and local officials, and others, as appropriate.

C. Responsibility Assignment Matrix (RAM)

The RAM is a tabular representation of the organizational responsibilities for performing the work efforts defined in the work breakdown. It defines the intersection of the OBS and the WBS. The RAM can be found in Appendix C.

D. Work in Kind (WIK)

The Illinois Department of Natural Resources, the project sponsor, will participate in project formulation, assessment of selected plan and review of draft document. Work-in-kind credit will be given for this work. Work by the Illinois Department of Natural Resources is estimated to take 60 person days and cost $30,000.

V. Product Development Schedule

The product development schedule includes dates for all reviews. Changes to the schedule are initiated by the Product Delivery Team and approved by the Project Manager with concurrence from the District PRB for major milestones.

A. Major Milestones

The schedule for this feasibility phase and completion of the DPR covers approximately 12 months, including a public review period. The feasibility study initiation date is August 1, 2001. Major milestones are shown in bold.

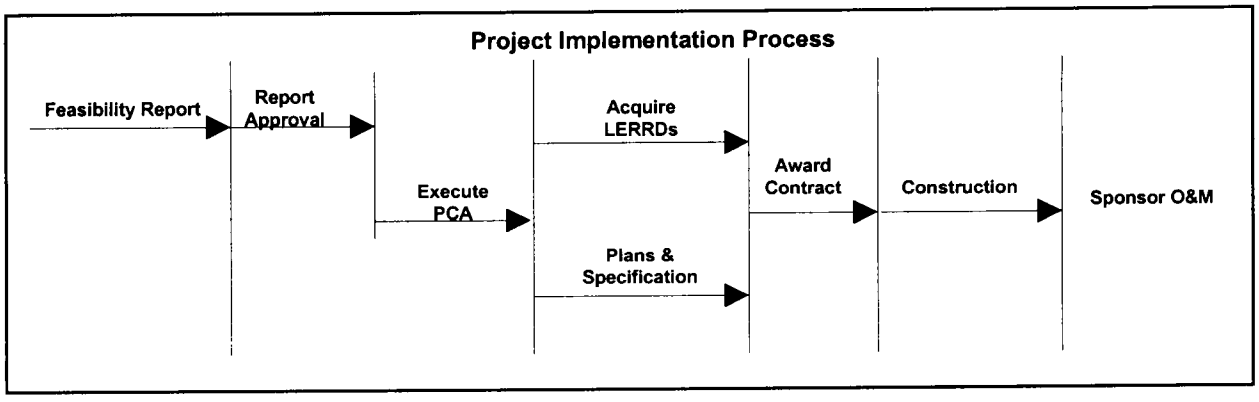
Event	Start date	End date
DRAFT REPORT		
Start Feasibility Phase	Aug 01	Aug 01
Existing Project Conditions	Aug 01	Nov 01
Project Formulation		
Formulate Goal, Objectives, & Potential Features	Aug 01	Dec 01
Evaluation of Alternatives and Preliminary Design	Dec 01	Mar 02
Review of Alternatives	Mar 02	May 02
Alternatives Evaluation Recommending Selected Plan	May 02	Jun 02
Draft Report with NEPA Document	**Aug 01**	**Jul 02**
Independent Technical Review	Jul 02	Aug 02
Value Engineering Analysis (VE)	Jul 02	Aug 02
Public Review	Sept 02	Sept 02
FINAL REPORT	**Oct 02**	**Oct 02**
Project Approval/Final Report with NEPA Document	**Oct 02**	**Dec 02**
Draft PMP for Implementation	**Nov 02**	**Dec 02**

* Remaining Implementation Steps	Start Date	End Date
Execute PCA	Jan 03	Jan 03
Obtain LERRDs	Jan 03	Apr 03
Complete Plans and Specifications	Dec 02	Apr 03
Award Construction Contract	Apr 03	Jul 03
Complete Construction	Aug 03	Nov 04

* The Remaining Implementation Steps are provided for information only. A separate PMP/QCP will be developed and approved for this work phase. This schedule assumes projects are constructed under an existing authority.

B. Task Dependencies and Timeline for Work Activities

A copy of the detailed project network will be available upon request. In addition, the following table corresponds to tasks identified in the WBS. This table will be updated as the project progresses. The graphic below summarizes the project implementation process. A detailed Critical Path Network is found in Appendix D.



VI. Feasibility Study Cost Estimate

The cost estimate for completion of the feasibility study is $655 (does not include monitoring). Section III breaks out the estimated costs to complete each individual task. Organization cost estimates by fiscal year are shown below. These were developed based on the RAM and cost estimates for each task in the WBS.

	FY2001	FY2002	FY2003
PM	16	154	65
ED	2	293	65
RE	1	25	5
WIK		25	5
Total	19	497	140

VII. Quality Control

The Rock Island District is responsible for ensuring that the feasibility phase products conform to all current professional practices and standards. The Rock Island District Quality Management Plan (QMP), dated 1 September 1999, defines Quality Control (QC) as the process employed by USACE for the performance of a task that meets the agreed-upon requirements of the customer and appropriate technical and policy criteria, on schedule and within budget.

The following quality review process will be conducted to ensure a quality product. All documentation to validate the quality review process will be maintained in the District File (PM-M).

A. Interim Product Reviews

The product development team is responsible for producing a high quality product to meet the needs of the customer. Review of the product will follow the District QMP and other applicable written guidance. District management reviews will follow program charters for project quality execution.

B. Draft Report

The draft report, which contains NEPA and environmental statute compliance considerations, will be distributed to resource agencies, landowners, and other stakeholders for review and comment prior to formal distribution to the public.

C. Independent Technical Review (ITR)

An ITR will be performed on the draft report. In order to provide a comprehensive technical review, actual team member selection will be based on individual expertise, technical background, and generally no previous direct association with the project development. All comments resulting from this review will be resolved in accordance with the District QMP. Functional team members will be assigned as follows:

Function	Organization	Name*
Planning/Program Management	PM-M	
Environmental/Cultural Analysis	PM-A	
Social-Economic Analysis	PM-A	
Engineering/Environ Engrg. Analysis	ED-DN	
Geotechnical Analysis	ED-G	
Hydraulic/Hydrology Analysis	ED-HH	
Electrical/Mechanical Engineering Analysis	ED-DG	
Structural Engineering Analysis	ED-DS	
Cost Engineering Considerations	ED-C	
Real Estate Aspects	RE-A	
Legal Considerations	OC	
Construction Considerations	CD	

*Names will be added when ITR reviewers are assigned.

Final Report Technical and Policy Compliance. ***The final report will be reviewed for technical and policy compliance. The Technical and Policy Compliance Checklist form in Appendix D will be completed prior to report/project approval and filed in the District File.***

PMP SUBMITTED BY:

Brad Thompson
Study Manager — 4/9/02 Date

Tom Heinold
Project Engineer — 15 April 2002 Date

Randy Kraciun
Project Biologist — 4/9/02 Date

Joanne Lieving
Real Estate Specialist — 4/9/02 Date

REVIEWED BY:

Dan Holmes, P.E.
Chief, Environmental Engineering Section — 4/12/02 Date

Paul A. Kowalczyk, P.E.
Chief, Design Branch, Engineering Division — 4/16/02 Date

Joseph Raoul, Jr., P.E.
Chief, Engineering Division — 4/19/02 Date

Ken Barr
Chief, Economic & Environmental Analysis Branch — 4-24-02 Date

Brad Thompson, AICP
Program Manager — 4/9/02 Date

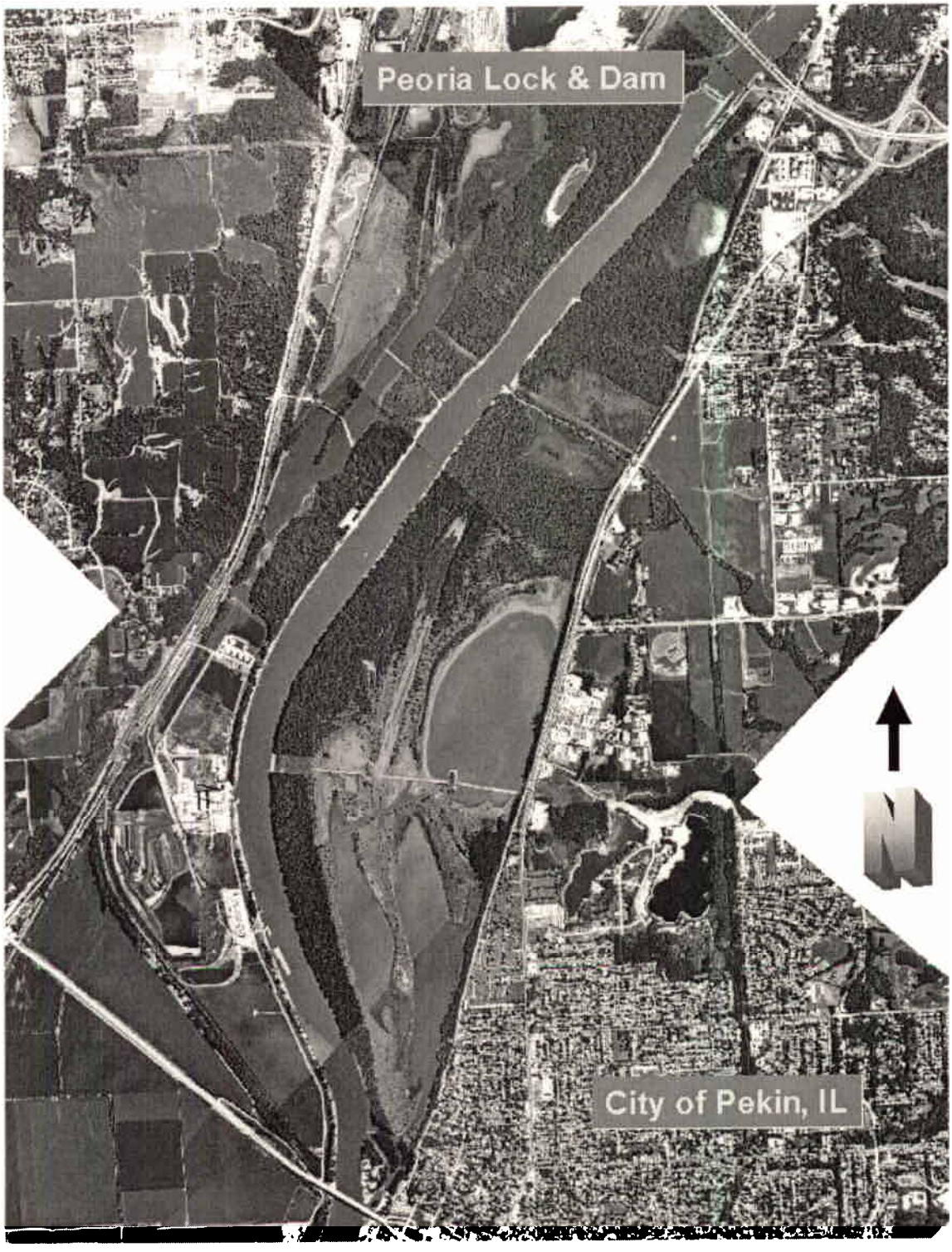
Joe Kellett, P.E.
Chief, Project Management Branch — 4-9-02 Date

APPROVED BY:

Gary L. Loss, P.E.
Chief, Planning, Programs, & Project Mgmt Division — 4/22/02 Date

All copies are electronic except District File.

CF: Dist File (PM)
PM
PM-M
PM-A
ED-DN
ED-HH
RE


Peoria Lock & Dam
N
City of Pekin, IL

APPENDIX A - MONITORING PLAN

TABLE 1 - Data Collection and Performance Evaluation Matrix

Project Phase	Type of Activity	Purpose	Responsible Agency	Implementing Agency	Funding Source	Implementation Instructions
Feasibility	Resource Monitoring	Establish baselines for problem identification and performance evaluation.	Corps/Sponsor	Corps/Sponsor	Corps/ Sponsor	See Table 2
	Problem Analysis	Identify system-wide problems based on data and observations.	Sponsor	Sponsor	Sponsor	
		Identify site-specific problems consistent with project goals and objectives.	Corps/Sponsor	Corps/Sponsor	Corps/ Sponsor	
	Project Feature Data Collection	Establish need of proposed project features consistent with goals and objectives.	Corps	Corps	Corps/ Sponsor	
Design	Data Collection for Design	Include quantification of project objectives, design of project, and development of performance evaluation plan.	Corps	Corps	Corps	
Construction	Construction Monitoring	Assess construction impacts; assure permit conditions are met.	Corps	Corps	Corps	
Post-Construction	Performance Evaluation Monitoring	Determine success of project as related to goals and objectives.	Corps (quantitative) Sponsor (field observations)	Sponsor as part of O&M, or Corps through WRDA Sec 519 appropriation	Corps/ Sponsor	

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TABLE 2 - Resource Monitoring and Data Collection Summary

Type Measurement	Water Quality Data						Engineering Data			Natural Resource Data			Sampling Agency	Remarks
	Pre-Project Phase		Design Phase		Post-Const. Phase		Pre-Project Phase	Design Phase	Post-Const. Phase	Pre-Project Phase	Design Phase	Post-Const. Phase		
	Apr-Sep	Dec-Mar	Apr-Sep	Dec-Mar	Apr-Sep	Dec-Mar								
POINT MEASUREMENTS														
Water Quality Stations														
Turbidity		M				M							Corps	
Secchi Disk Transparency		M				M							Corps	
Dissolved Oxygen		M				M							Corps	
Specific Conductance		M				M							Corps	
Water Temperature		M				M							Corps	
PH		M				M							Corps	
Total Alkalinity		M				M							Corps	
Chlorophyll		M				M							Corps	
Velocity		M				M							Corps	
Water Depth		M				M							Corps	
Ice Thickness		M				M							Corps	
Snow Depth		M				M							Corps	
Wind Direction		M				M							Corps	
Wind Velocity		M				M							Corps	
Wave Height		M				M							Corps	
Air Temperature		M				M							Corps	
Percent Cloud Cover		M				M							Corps	
Elutriate Analysis	1												Corps	
Boring Stations Geotechnical Borings							1	1						
Fish Stations Electrofishing										5Y		5Y	ILDNR	Coordinate with EMP
Benthic Surveys										1		1	ILDNR	

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Type Measurement	Water Quality Data						Engineering Data			Natural Resource Data			Sampling Agency	Remarks
	Pre-Project Phase		Design Phase		Post-Const. Phase		Pre-Project Phase	Design Phase	Post-Const. Phase	Pre-Project Phase	Design Phase	Post-Const. Phase		
	Apr-Sep	Oct-Mar	Apr-Sep	Oct-Mar	Apr-Sep	Oct-Mar								
TRANSECT MEASUREMENTS														
Hydrographic Soundings							1	1	5Y				Corps	
Vegetation Transects Visual Survey							1	1	5Y				ILDNR	
A. AREA MEASUREMENTS														
Mast Tree Survey										1	1	5Y	ILDNR	
Mapping										1		5Y	ILDNR	
B. LAND SURVEY														
Topographic							1						Corps	
Aerial Photography/ Remote Sensing							1						Corps	
C. HYDRAULIC AND HYDROLOGY MEASUREMENTS														
Water Level							C	C	C				Corps	

LEGEND
C = Continuous
Y = Yearly
NY = n-Year interval (5Y = every 5 years)
M = Monthy
1,2,3 --- = number of times data is collected within designated project phase

APPENDIX B - ORGANIZATIONAL BREAKDOWN STRUCTURE

ORGANIZATIONAL BREAKDOWN STRUCTURE (OBS)

The OBS describes the responsibility of each organization in providing input to and/or completing tasks identified in the Work Breakdown Structure. The following paragraphs identify the management and technical responsibilities for the study.

1. Planning, Programs, and Project Management Division (PM)

The PM is the primary representative of the USACE Commander and serves as point of contact with the non-Federal sponsor. The Project Manager is responsible for reporting to Rock Island District's Project Review Board and for preparing required Life Cycle Project Management reports. The PM responsibilities include developing and monitoring project schedules and finances, processing schedule and cost change requests, managing contingencies, reviewing budget documents and the Project Cooperation Agreement, and identifying problems and issues.

A representative from the Project Management Branch is the PM Project Manager. Responsible activities include leading plan formulation, monitoring the expenditure of funds by division, monitoring the progress of technical work, and developing and preparing the Definite Project Report. The Environmental Analysis Section will be responsible for developing environmental restoration measures, collecting and evaluating historic properties data, developing and completing habitat and incremental analyses for project justification, assessing environmental impacts, preparing mitigation plans, and ensuring environmental compliance. The Economic and Social Analysis Section will be responsible for developing economic data and demographic information, public involvement, and evaluating economic impacts.

2. Engineering Division (ED)

The ED project engineer will be responsible for coordinating the ED contribution to the feasibility study, which includes coordinating with the Project Manager regarding the status of engineering work efforts. The Cost Engineering Branch will be responsible for developing cost estimates for initial construction and operation and maintenance of alternative plans and the selected plan. The Hydrology and Hydraulics Branch will be responsible for conducting hydrologic and hydraulic design studies. The Design Branch will be responsible for developing designs and drawings, structural investigations, and surveying and mapping activities. The Survey Branch will perform ground and bathymetric surveys, provide technical support to the study management team participants, and coordinate activities with Geographic Information Systems needs. The Geotechnical Engineering Branch will perform drill borings, soils testing, and geotechnical analyses (slope stability, bearing capacity, settlement, wave and borrow material analyses) as required for the study.

3. Real Estate Division (RE)

The RE will be responsible for performing all required real estate activities for the project. Real estate activities will include determining land ownership, developing the real estate gross appraisal, and preparing the real estate plan that will include a baseline cost estimate for real estate, development of a detailed schedule of acquisition milestones, and a general description of the area and total acreage to be acquired, with fee and easement breakdown. The Appraisal

Branch will prepare gross appraisals. The Acquisition Branch will obtain rights-of-entry, prepare preliminary real estate acquisition maps, and prepare the real estate appendix to the Definite Project Report. The RE also will prepare the physical takings analysis and the preliminary attorney's opinion of compensibility.

4. Office of Counsel (OC)

A representative from the OC will perform quality assurance and legal sufficiency review of all technical documents and support study management team members in addressing legal issues as they develop during the feasibility study.

5. Support Offices/Organizations

Numerous internal and external agencies/organizations will be consulted throughout the project for their input. Some agencies may participate in the entire project and others may only participate in the plan formulation process. Those organizations that have shown a special interest in the study, or have a certain area of expertise for product development, will be included throughout the study period. Agencies involved with the study thus far and having expressed an interest in continued coordination/consultation include Tri County Regional Planning Commission, City of Pekin, The Nature Conservancy, the Natural Resources Conservation Service, and the U.S. Fish and Wildlife Service.

6. Non-Federal Sponsor

The non-Federal sponsor for the Illinois River Ecosystem Restoration Feasibility Study is the Illinois Department of Natural Resources, which is cost sharing 50% of the feasibility study. The sponsor will be involved in all aspects of the feasibility study to ensure agreement with the findings of the study. The Corps will fully coordinate with the sponsor for their experience and expertise. The sponsor will attend progress meetings and the public meeting/workshop, participate in the plan formulation process, provide scientific and technical input to field studies, assist in the development of recommended plans, perform quality assurance, and review the reports.

APPENDIX C - RESPONSIBILITY ASSIGNMENT MATRIX

RESPONSIBILITY ASSIGNMENT MATRIX (RAM)

The RAM is a tabular representation of the organizational responsibilities for performing the work efforts defined in the work breakdown. It defines the intersection of the Organizational Breakdown Structure (OBS) and the Work Breakdown Structure (WBS). The table below presents the RAM for the Feasibility Study. The first column is an abbreviated description of each activity. The responsible organization is represented horizontally in the first row of the matrix. The individual cells of the matrix identify the responsible organization for each WBS activity, with the number "1" designating lead organizations and the number "2" designating contributing organizations.

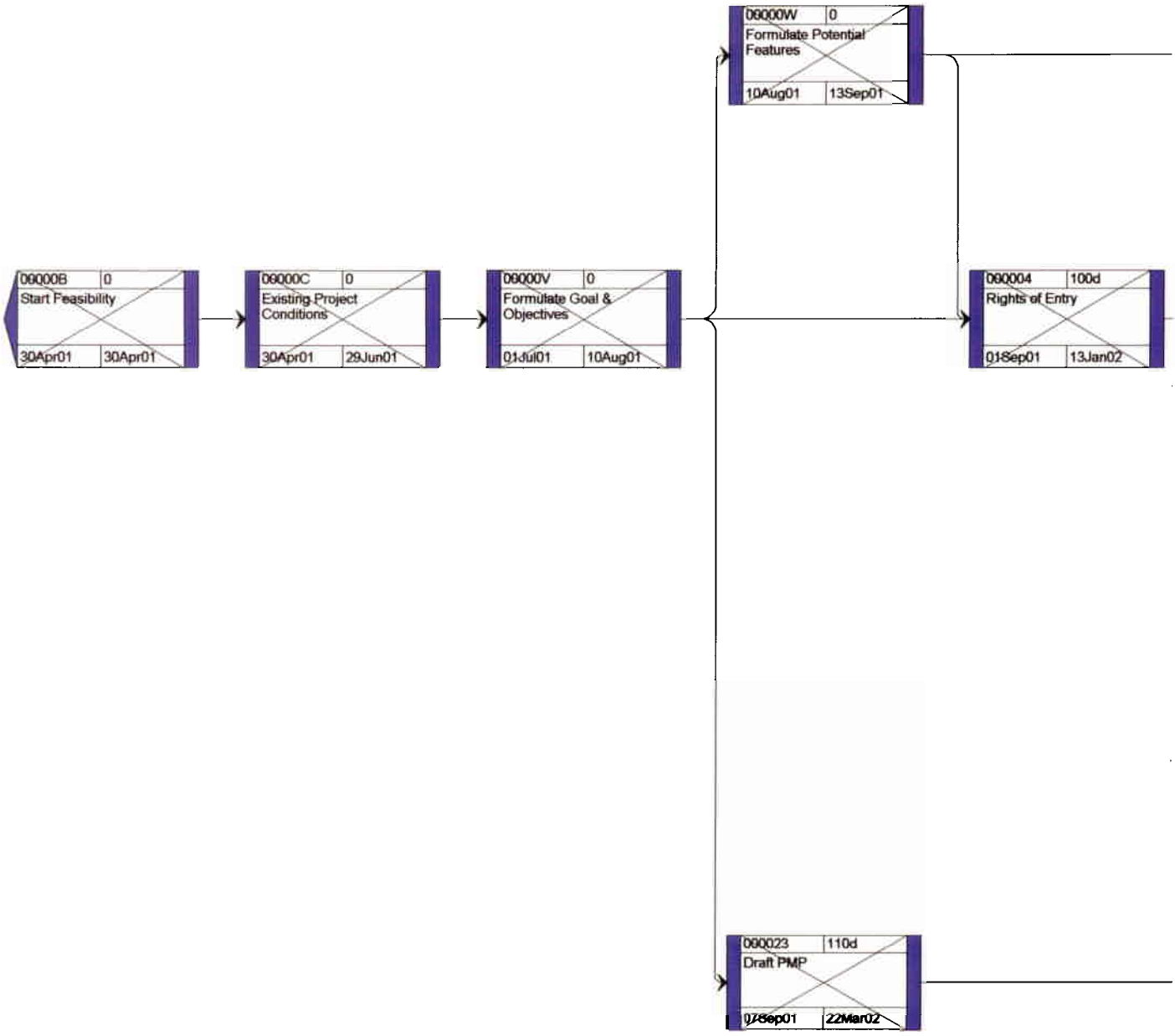
Responsibility Assignment Matrix

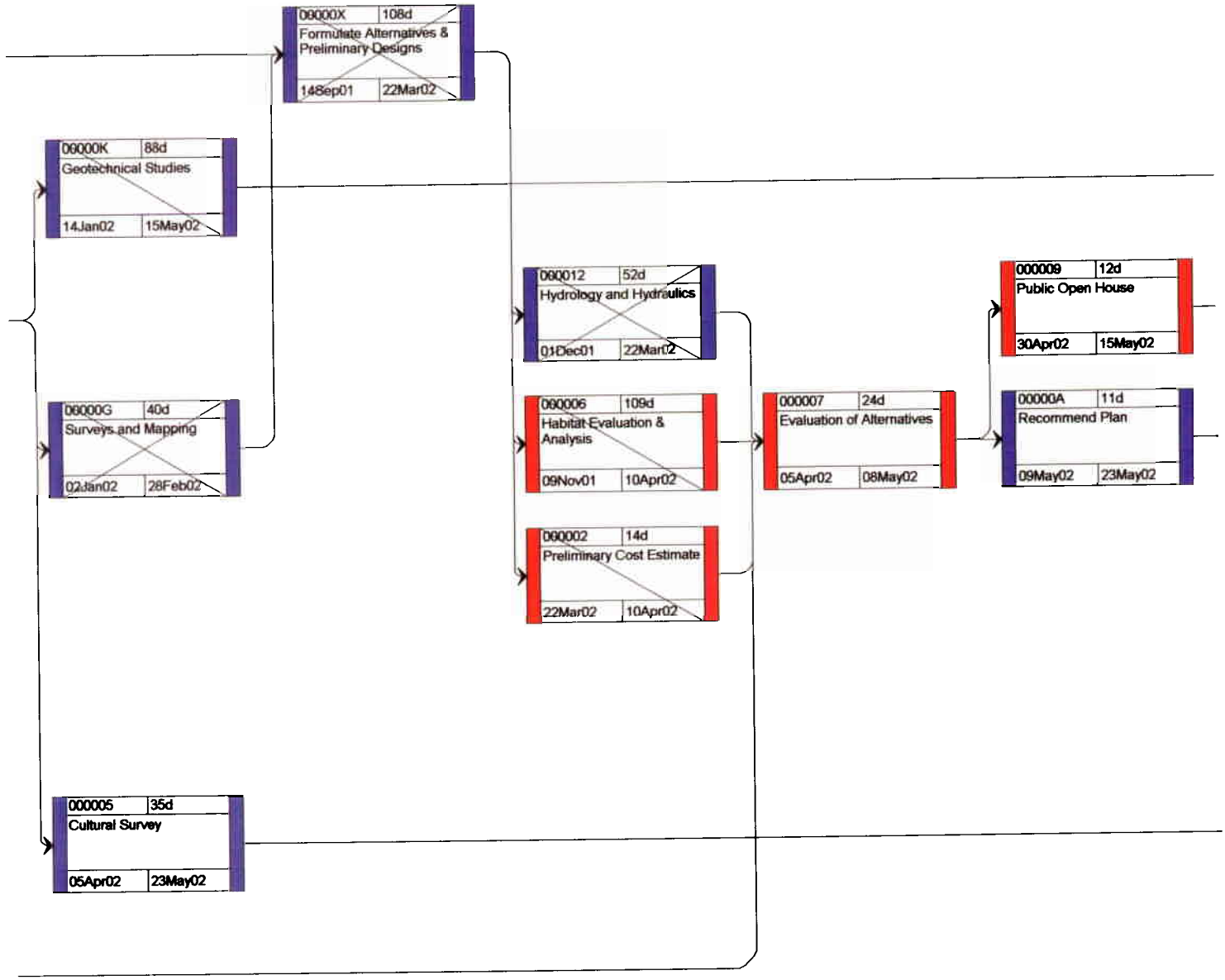
	ED-C	ED-G	ED-D	ED-H	ED-S	PM-AE	PM-AR	PM-M	RE	Sponsor
Start Feasibility								1		
Existing Project Conditions			1				2	1		2
Specify Problem and Opportunities			1				2	1		1
Inventory Existing Data			1					1		1
Physical Site Cond., Surveys, & Mapping			1		2					1
H&H, Geotechnical, HTRW		2	1	2						1
Biological and Cultural Data						1	1			1
Real Estate Data									1	1
Forecast Future Resource Conditions			2				2	1		2
Project Formulation			1				2	1		2
Formulate Goal and Objectives			1				2	1		2
Formulate Potential Features			1				2	1		2
Formulate Alternatives & Prelim Designs			1				2	1		2
Eval of Alt & Preliminary Designs		2	1	2		2	2	1		2
Eng. Design (Civ, Struct, Elec, Mech)			1							
Surveys and Mapping			2		1					
Hydrology and Hydraulics			2	1						
Geotechnical		1	2							
HTRW			1							
Cost Estimate	1		2							
Tract Ownership Data and Rights of Entry									1	2
Cultural Survey							1			
Habitat Evaluation and Analysis			2				1			2
Review of Alternatives			2				2	1		2
Agency Coordination – IPR							1			2
Public Open House			2			1	2	2		2
Alt Eval. Recommending Selected Plan			2				2	1		2
Assessment of Selected Plan			1				2	1		2
Design and Construction Analysis			1							
Eng Design (Civ, Struct, Elec, Mech)										
Geotechnical Analysis		1	2							

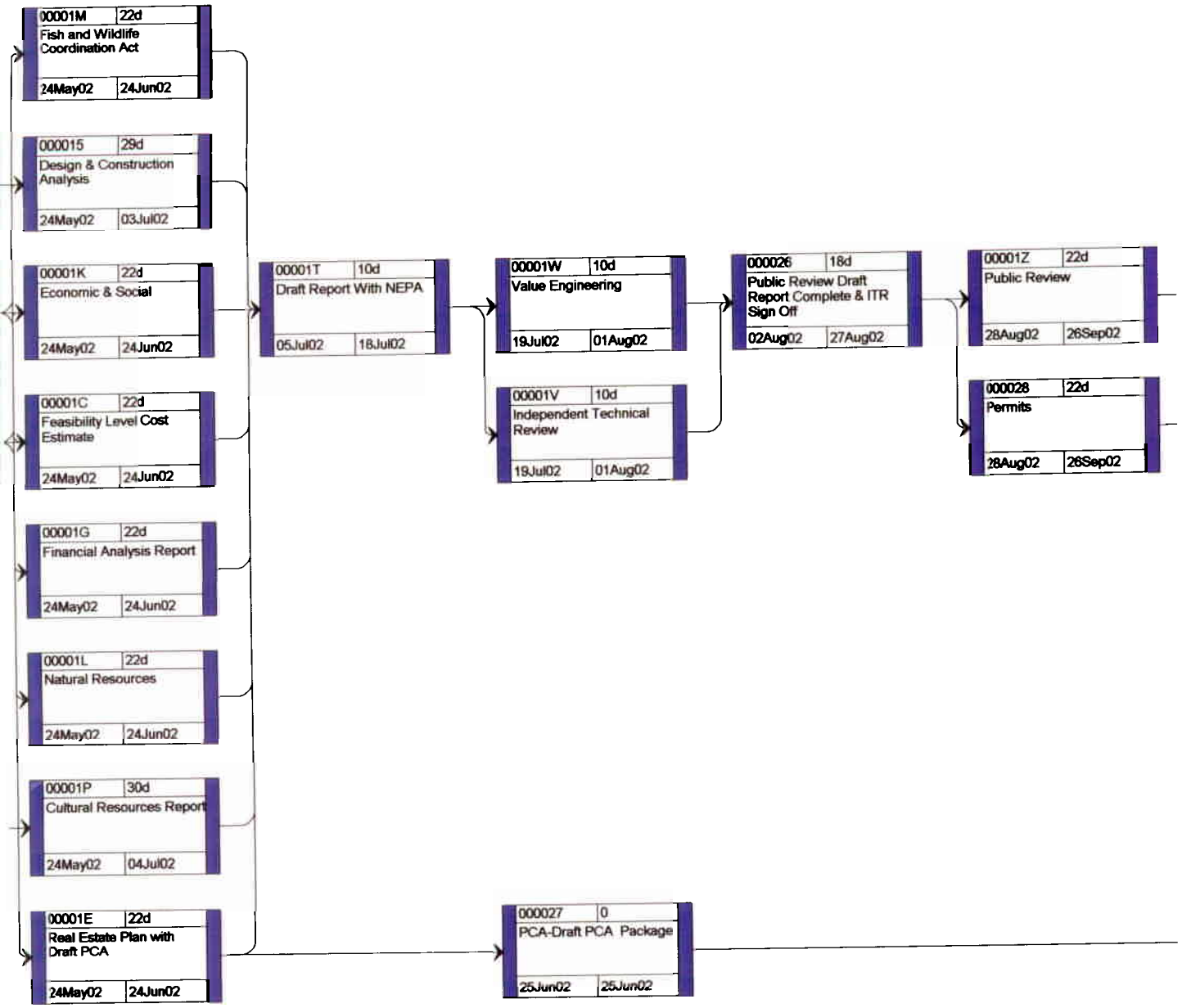
	ED-C	ED-G	ED-D	ED-H	ED-S	PM-AE	PM-AR	PM-M	RE	Sponsor
Hydrology and Hydraulics Analysis			2	1						
Water Quality Analysis			2	1						
HTRW Analysis			1							
Obtain Permits			1	2						
Feasibility Level Cost Estimate	1		2							
Real Estate Plan with Draft PCA									1	
Financial Analysis Report						1				
Environmental Analysis							1			
Economic and Social						1				
Natural Resources										
Fish and Wildlife Coordination Act Report							1			
Cultural Resources Report							1			
Operations, Maintenance, and Rehab Considerations			1							
Post-Const Proj Performance Assessment			1							
Draft Report with NEPA		2	2	2		2	2	1		2
Internal Technical Review	2	2	1	2	2	2	2	1	2	2
Value Engineering	1	2	1	2	2					
Agency Review								1		
Public Review								1		2
Project Approval/Final Report with NEPA								1		
Draft PMP for Implementation			1					1		

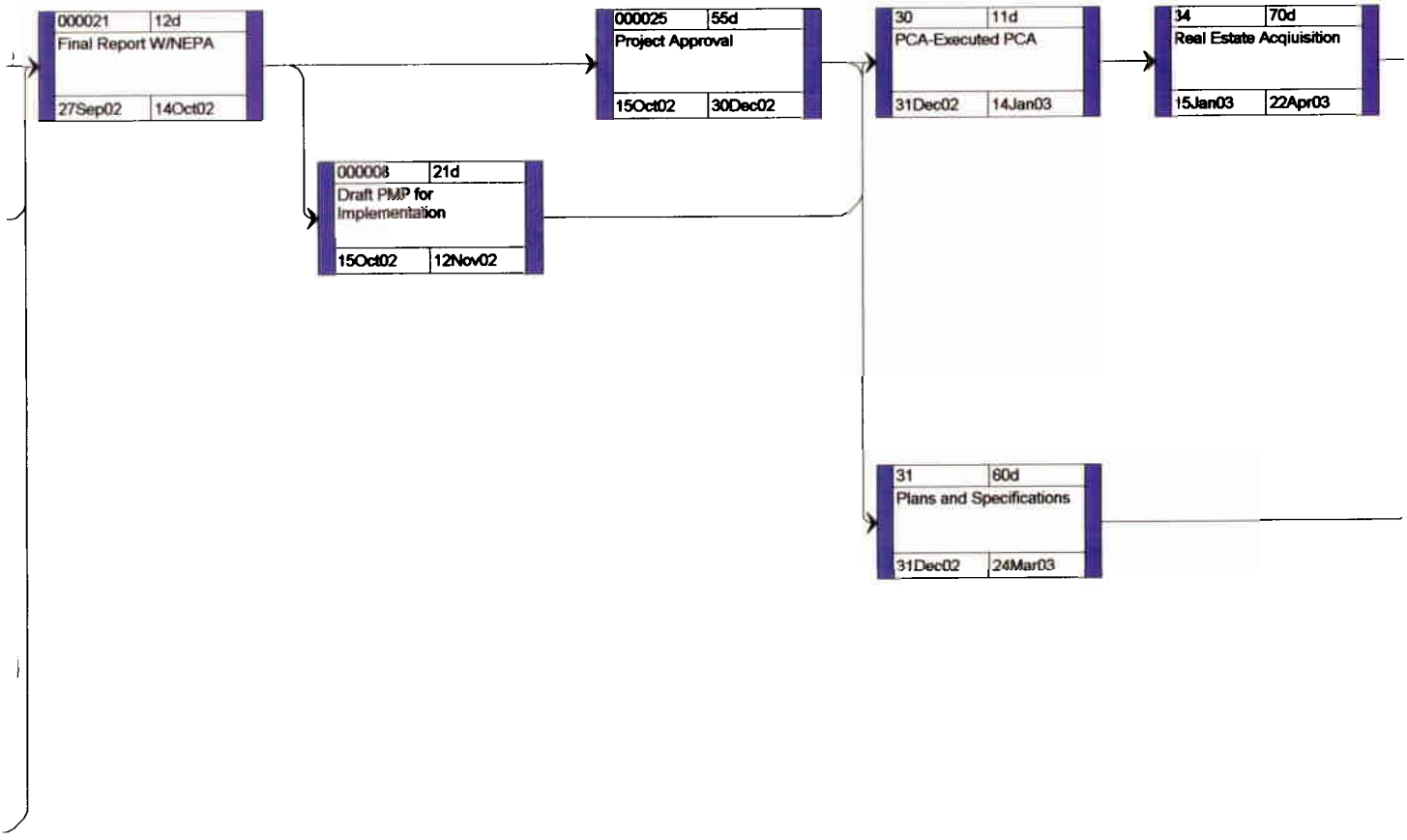
APPENDIX D – CRITICAL PATH NETWORK

Project:	ECO_PEKIN_LK_MA
Time Now:	05Apr02
Start:	28Mar02
Finish:	01Nov04
Run:	05Apr02




060000X
108d
Formulate Alternatives & Preliminary Designs
14Sep01
22Mar02
060000K
88d
Geotechnical Studies
14Jan02
15May02
060012
52d
Hydrology and Hydraulics
01Dec01
22Mar02
000009
12d
Public Open House
30Apr02
15May02
060000G
40d
Surveys and Mapping
02Jan02
28Feb02
060006
109d
Habitat Evaluation & Analysis
09Nov01
10Apr02
000007
24d
Evaluation of Alternatives
05Apr02
08May02
00000A
11d
Recommend Plan
09May02
23May02
060002
14d
Preliminary Cost Estimate
22Mar02
10Apr02
000005
35d
Cultural Survey
05Apr02
23May02


00001M
22d
Fish and Wildlife Coordination Act
24May02
24Jun02
000015
29d
Design & Construction Analysis
24May02
03Jul02
00001K
22d
Economic & Social
24May02
24Jun02
00001C
22d
Feasibility Level Cost Estimate
24May02
24Jun02
00001G
22d
Financial Analysis Report
24May02
24Jun02
00001L
22d
Natural Resources
24May02
24Jun02
00001P
30d
Cultural Resources Report
24May02
04Jul02
00001E
22d
Real Estate Plan with Draft PCA
24May02
24Jun02
00001T
10d
Draft Report With NEPA
05Jul02
18Jul02
00001W
10d
Value Engineering
19Jul02
01Aug02
00001V
10d
Independent Technical Review
19Jul02
01Aug02
000027
0
PCA-Draft PCA Package
25Jun02
25Jun02
000026
18d
Public Review Draft Report Complete & ITR Sign Off
02Aug02
27Aug02
00001Z
22d
Public Review
28Aug02
26Sep02
000028
22d
Permits
28Aug02
26Sep02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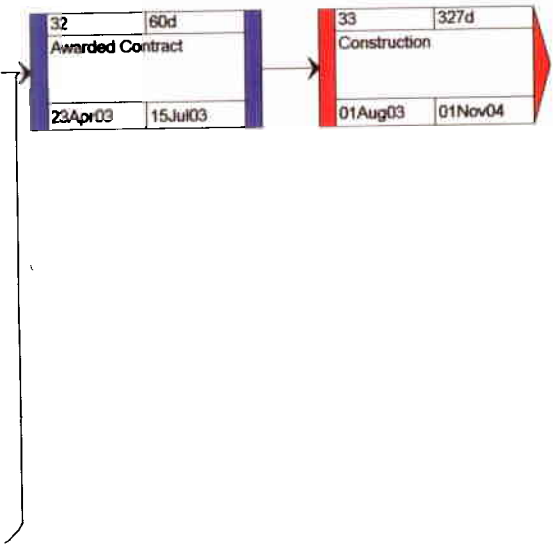
Final Report W/NEPA
27Sep02
14Oct02
000025
55d
Project Approval
15Oct02
30Dec02
30
11d
PCA-Executed PCA
31Dec02
14Jan03
34
70d
Real Estate Acqiuisition
15Jan03
22Apr03
000008
21d
Draft PMP for Implementation
15Oct02
12Nov02
31
60d
Plans and Specifications
31Dec02
24Mar03


32
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Awarded Contract
23Apr03
15Jul03
33
327d
Construction
01Aug03
01Nov04

APPENDIX E - TECHNICAL AND POLICY COMPLIANCE CHECKLIST

CEMVR PROJECT DECISION DOCUMENT
Feasibility Report
Technical and Policy Compliance Checklist

Name of Project:

SIGNATORY OR REVIEWING OFFICER	RECOMMENDED FOR APPROVAL	DATE	REVIEW ITEM (REF. CEMVR QMP)	REMARKS AND DOCUMENTATION
PROJECT MANAGEMENT				
PROGRAM MANAGER			SPONSOR COORDINATION AUTHORITY FUNDING PLANNING/DESIGN PACKAGE PERMIT PACKAGE TECH REVIEWS	
PM-A			ENVIRONMENTAL ANALYSIS (EA) NEPA, ENDANGERED SPECIES ACT FISH AND WILDLIFE COORD. ACT NATIONAL HISTORIC PRESERV. ACT CLEAN WATER ACT ECONOMIC ANALYSIS PROJECT SUFFICIENCY	
PM-M			PROJECT SUFFICIENCY	
ENGINEERING				
TECHNICAL MANAGER			DESIGN CONSIDERATIONS R.O.W. QUANTITIES/COST ESTIMATE INPUT HTRW ASSESSMENT	
SECTION CHIEF			PROJECT SUFFICIENCY	
ED-C			COST ESTIMATE SUFFICIENCY	
ED-G			GEOTECHNICAL CONSIDERATIONS	
ED-H			H&H CONSIDERATIONS	
ED-D			PROJECT SUFFICIENCY	
ED, CHIEF			PROJECT SUFFICIENCY	
REAL ESTATE				
RE-P			REAL ESTATE ANALYSIS	
RE-A			R.O.W. COORDINATION CONTRIBUTED FUNDS COORDINATION DRAFT PCA PROJECT SUFFICIENCY	
RE, CHIEF			PROJECT SUFFICIENCY	
OFFICE OF COUNSEL				
OC, CHIEF			LEGAL SUFFICIENCY	
PRODUCT APPROVAL				
PM, CHIEF			TECHNICAL AND POLICY COMPLIANCE ADMINISTRATIVE COMPLIANCE REGULATORY COMPLIANCE ISSUES RESOLVED	
DE	COL, EN COMMANDING		PROJECT ACTION APPROVAL PROCEED WITH IMPLEMENTATION	